ACC-4000 Release Notes • Release V6.3

Version 6.3 of the ACC-4000 Controller Software is a maintenance release and includes the following additions enhancements and bug fixes.

Additions

The following features have been added to the ACC-4000:

Configuration File

The configuration file has increased to 318 lines. Parameters 309 to 315 are reserved for future use.

Fixbox

The following configuration file parameter has been added to support the Fixbox feature:

T [316] Perform Fixbox (global send address) after fast poll (T= do Fixbox, F = do not do Fixbox)

The fix box parameter deals with the three global send address punches sent after a fast poll. These punches were done to fix a firmware problem in the Impulse 7000 converter line that killed the first response after a fast poll. If the parameter is set to "T", the three global send addresses will be sent after the fast poll. If the parameter is set to "F", no global send address will be done. A site experienced a problem with the three global send addresses bleeding into the downstream data path.

Newbox

The Newbox task now does a group assignment at initialization of a converter. NEWBOX now assigns the channel map # to OSD converters as the group number assignment. This permits MSGMGR to broadcast Channel ID maps and Out-of-Band Barkers to converters using groups rather than temporary groups. This feature is used to enable quicker CFT2200 initializations by off-loading the Channel ID map punches to a periodically running task that punches the Channel ID map to the appropriate group. This is used in conjunction with Message Management and configuration file option [305], OSD message punches performed by Newbox task. (-1 = don't punch.) To use this feature it is necessary to first refresh all of the OSD converters.

Utilities

A new utility program, DMPOSD, may be used to read the message headers from a two-way RF converter or scrambler/encoder.

Message Manager

The following configuration file changes have been made to accommodate the IBB countdown control and IBB download rate feature new to Message Management:

[317] IBB count down control, (bitmap int where 0-3 enables fields 11-14 in in-band data stream (values 0-15).

[318] IBB download rate (# of DD/CD fields to repeat in in-band data stream) (values 1-63).

IBB countdown control is a bitmap where bits 0 through 3 indicate whether the scrambler/encoders should send video fields 11 through 14 to converters. The default value is 15 decimal (all bits set) which indicates that fields 11 to 14 should be included. NOTE: Fields 11 and 12 must be included for CFT2200 converters.

IBB download rate is an integer between 1 and 63 which indicates how many times to repeat field 15 before proceeding to the next field in the VBI countdown sequence. The default value is 5. Increasing this number will decrease the message download time but will increase channel acquisition time.

MSGMGR has been modified to only select converter types 30 and higher for assignment to temporary groups when broadcasting to a channel map destination.

Known problems:

If an OBB or IBB map is modified after it is broadcast, messages which are added may never be recognized. This is because clear punches are sent only during the first broadcast of an OBB or IBB map. The work-around is to clear the map, delete it and add it again. It may be necessary to wait for the expiration interval to elapse before the map may be added again.

Message Loader

Modified MSGLD to allow the message number and message type to be specified on the command line. If the message type and number already exists and is scheduled for broadcast, a clear punch will precede the next rebroadcast.

Default In-Band Barker Screen

The In-Band Barker screen now supports start and stop times when scheduling In-Band Barker maps.

PowerChute Software

The PowerChute Software used to run the APC UPS is now included in the ACC-4000 version 6.3.022 and above software. Please refer to the PowerChute tech tips for more details on installation of the UPS and installation/verification of PowerChute Software.

Bug Fixes

DBSUMMARY and DBSELECT

DBSUMMARY and DBSELECT would stop processing when they found a record that was locked. This has been fixed.

Quality Control

The Quality Control Screen no longer requires the Quality Control range to be specific according to converter type and partition, i.e., two-way and starfone converters can be entered into Quality Control screens even though the Quality Control range has been selected in a one-way partition. The Quality Control screen has been modified to automatically advance to the serial number field. This enables the operator to "wand" many serial numbers in at one time without going back to the keyboard to press the Enter key.

User Interface Screens

The user interface screens would lock up with an Accell heap error. This has been fixed.

System Shutdown

Occasionally, when trying to shut the system down, the system would hang. This has been fixed.

Displaying All Services

The screen which displays all services now supports the 132 columns necessary to read the report more easily.

Backups

Occasionally, during or after a successful database backup, the system would report a false warning that the backup had been running for over 2 hours. This has been fixed.

DBSELECT

The DBSELECT task was crashing in the install date option. This has been fixed.

Wire Link

The Wire Link 340 command was limiting the row count to 16 allowing the purchases upload to only run for 16 purchases. This has been fixed.

Message Manager and NEWBOX

Message Manager (MSGMGR) and NEWBOX now correctly replace existing Channel IDs when broadcast periodically or during converter refresh.

Message Manager (MSGMGR) and NEWBOX now correctly clear Out-of-Band Barkers from the converter memory.

Message Manager (MSGMGR) now correctly finds all of the scramblers assigned to the channel specified in an IBB Map.

Scripts

The bcastmsg and bcastibb scripts found in /usr/acc4000/scripts can be used to force an immediate rebroadcast of a message which has already been scheduled. These scripts are self explanatory and can be run by the operator.

Indexes

The indexes in the acclogger and sylogfilter logging files were being corrupted upon a reboot which would result in the inability to write to these files. This has been fixed.

STARPORT

STARPORT support now supports multiple channels.

Master Database Transaction Log

The master database transaction log is now truncated during each backup. This prevents it from getting too large which could result in database problems.

Converter Operations Screen

During an initialization punch for a specific converter in the Converter Operations screen, the screen was not updating the database with the RF level return value calculated from the initialization punch. This resulted in an incorrect value punched to the converter on a subsequent change or refresh punch. This has been fixed.

Viewership or Opinion Polling Report

When trying to do a Viewership or Opinion polling report, the screens would first check to see if data was available. If no data was available the screens would inform the operator and no report would be generated. If data was available the screen would appear to hang for quite some time, depending upon how much data was in the table, before creating the report. This hang no longer occurs.

Non-responding Fast Poll

After an operator initiated non-responding fast poll completes, the question "Do you want to verify the non-responding converter poll?" flashes on the screen and then disappears in character mode. The system is still looking for an answer but the operator does not know what to do. This has been fixed.

Global Authorization and De-authorization Punches

In the Send Global punches and Ranger operations screen the global authorization and de-authorization punches did not punch properly. This has been fixed.

User Class Screen

In the User Class Screen, under system reports, if the ability to print the system configuration files is disabled it would also disable the system button on the reports screen. This has been fixed.

Channel Maps

When changing any type channel map in the Channel Map screen, it was unclear as to what the screen was doing once the Accept key was pressed. A working message is now displayed when the system is saving the channel map. This has been fixed.

DBSUMMARY Report

In character mode, the following would occur:

In the DBSUMMARY report screen when selecting "D" for disk output, you cannot get to the disk field name and when you hit Accept a -8883 error message appeared. This has been fixed.

Single Converter Operations Screen

In the Single Converter Operations screen when changing a converter record, the hub number field was available to be changed. This field is no longer accessible on a change operation.

Channel ID Maps

Channel IDs for channels greater than 193 may be interpreted by older model converters as a bad site code, therefore causing the converters to go to an E8 status. Channel ID maps are now created with IDs for channels 1-99 if the B cable is not enabled. Previously, IDs were created for channels 1-198.

Out-of-Band Barker Screen

If the operator was adding an Out-of-Band Barker map and changed the map number that was assigned, the defaulted map number that was originally assigned was never properly deleted. This has been fixed.

Enhancements

The following enhancements have been made:

DATABASE RESTORE

For safety reasons, the DATABASE RESTORE option has been removed from the screens. Instead, a General Instrument Engineer can perform a database restore by opening a 132-window and entering the following command: restdata.fe. You can be in any directory to run this. It will ask you whether you want to restore from disk or tape and then ask for the super user password.

README File

The 6.3 Release now includes a README file. This file is located in the /usr/acc4000/data directory. This file contains any information or suggestions that were not available when your manual was printed. This includes these release notes. To display the README file:

1. Path to the /usr/acc4000/data directory.
2. Type **pg README** and press the **ENTER** key. Press **ENTER** as many times as are necessary to page through the entire document.
3. When you are finished reading the file, press **ENTER** at the end of the document or **Q** (Quit) at any time.

RF Data Collection

The automatic two-way RF data collection can be started with a cron-tab entry similar to the following:

```
# enter a cron-tab entry such as the following (for an 8:30 data collection)
#   30      8       *       *       * . $HOME/.profile; set -k; autocoll
```

As with all cron-tab entries this should be performed by a General Instrument Field Service Engineer or General Instrument personnel.

The automatic two-way RF data collection task has been changed to not start an automatic data collection if there is an operator initiated RF impulse operation, i.e., data collection, Viewership monitoring, etc. in progress. In addition, there is now a task called CANCOLL that can be started from a 132-window. This task will cancel an automatic two-way data collection that is currently in progress. Directions will be given when the task is started.

Configuration File Parameter (103)

Configuration parameter [103] "Maptype to use for polls" only applied to Non-responding polls. This parameter now applies to Non-responding polls **and** data collection. When set to "T" the poll task will poll active converters. If set to "F" it will poll only converters in the connect list. The default is "T".

Chronic Non-responding Reports

Chronic Non-responding reports now list totals for each amplifier along with a grand total for all amplifiers.

Wire Link

Wire Link - Option [166] allows the billing system to send changes to two-way values (purchase limit and purchases enable) and result in an optimized punch. The punch only sends information for those two fields. The Wire Link displays the punch class as "CT" on the Wire Link Monitor. Newbox supports the Wire Link punch class for "two-way values only."

Wire Link - The configuration file now goes out with default values for the serial port as follows:

7 [009] Turn Around Delay Time

300 [010] Time to wait for next characters

T [013] Xon / Xoff flow control

Headend Manager

The HEMGR (Headend Manager) has been enhanced to "tell" the DSEMGR (DSE Manager) to rebuild a specific DSE/MVP queue. This enhancement will only apply when changing a specific DSE/MVP from within the Headend Control Screen or when in the Default IBB screen. ***ALL DSE/MVPs will be rebuilt when changing channel schedules OR when you have deleted a specific DSE /MVP.***

MALT Logging Function

The ACC-4000 no longer supports the MALT logging functions. They have been replaced with the acc4000_X.log, acc40001.log, acc40002.log and acc40003.log files in the /usr/acc4000/data directories.

Subscriber Partitioning

Subscriber partitioning is now supported in the following manner:

System can now start their open partitions where ever they want. The following rules apply:

1. All partitions must be "open" for the size of your database. For example, if your database size is 128K subscribers, then four partitions must be open and in a contiguous area otherwise the system and SYBASE database will not start properly.
2. They can start and end in any partition as long as they are correct in depicting the size of your database **and** are contiguous.

Clearbox

The clearbox task now checks to see if the backup completed successfully before running.

OSD Messaging and Graff PSL

OSD messaging and Graff PSL transfers are now logged to the logger window and the data file /usr/acc4000/data/whologin.dat.

PSL Task

The PSL task now keeps an extra copy of all input submitted to the task for one week. This will make troubleshooting and debugging easier when necessary. The input for each day is saved in a separate history file named "pslxxx.inp", where xxx is the day of the week. For example, pslmon.inp, psltue.inp, etc. These files can be found in the /usr/acc4000/data directory.

MAPLD Task

The MAPLD task will now skip the loading of inactive groups of 8 tags. Since the 8 tag group is not loaded the XMITMAP task will not transmit them. This then reduces the global cycle time. The list transmission order previously was: Connect, TCB, Subscriptions, and Events. The *NEW* list transmission order is: **Connect, Events, TCB, and Subscriptions**. When events become active or inactive, the global list transmission restarts with the Connect list.

HEMGR Task

The HEMGR task will now perform a "global service code off" when a tag becomes inactive, regardless of what the global service code interval states in the /usr/acc4000/data/config.dat file.

ACCLOGGER Task

The ACCLOGGER task has been enhanced to detect system task failure. When system tasks die unexpectedly, a window will be displayed with the following message:

```
"Fatal ACC4000 Problem, System tasks died at "date". Please call TRC at
1-800-JERROLD. System will automatically reboot or you can reboot it
yourself".
```

Unless the ACCLOGGER task is killed, the system will reboot in two hours. The following message is then sent to all users every ten minutes until reboot:

```
"The system will reboot in ## minutes".
```

A total of six messages could be sent.

General Instrument Corporation
GI Communications Division
Printed in USA - 5/95 436-864-500

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